LAPTOP REQUEST CATALOG ITEM USING SERVICE NOW

NAAN MUDHALVAN REPORT

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BONAFIDE CERTIFICATE

Certified that this project report "**LAPTOP REQUEST CATALOG ITEM USING SERVICE NOW**" is the Bonafide work of **"RUTH M(953422104070), RAMYA K(953422104070), VARSHINI B(953422104093), SUGANTHI R (953422104083), PARAMESHWARI V(953422104063)"** who carried out the naan mudhalvan project work under my supervision.

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EXTERNAL EXAMINER   **INTERNAL EXAMINER**

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LAPTOP REQUEST CATALOG ITEM USING SERVICE NOW

1. INTRODUCTION

1.1 PROJECT OVERVIEW

The project "Laptop Request Catalog Item using ServiceNow" aims to simplify and automate the process of requesting laptops within an organization. In many institutions and companies, employees or students need laptops for their work or study purposes. Traditionally, this involves manual processes such as filling forms, sending emails, and waiting for approvals. This manual approach often leads to delays, errors, and lack of transparency.

Using ServiceNow, a cloud-based IT Service Management (ITSM) platform, this project provides a digital self-service catalog where users can easily request laptops. The form captures all necessary details such as user information, laptop type, justification for request, and cost center. Once submitted, the request is automatically routed to the manager or department head for approval, and then to the IT support team for fulfillment. This eliminates manual intervention and provides real-time tracking and notifications at every stage.

The project demonstrates how ServiceNow workflows, catalog items, notifications, and automation can be utilized to create an efficient and transparent IT asset request process.

1.2 PURPOSE

The main purpose of this project is to automate the laptop request and approval process using ServiceNow to ensure faster service delivery and better tracking.

Objectives:

- Streamline the entire request-to-approval cycle.
- Provide a transparent and trackable workflow.
- Ensure that requests reach the right approver without delay.
- Reduce administrative overhead and human error.

Benefits:

1. Improved Efficiency: Eliminates email-based communication and manual tracking.

2. Transparency: Every request is logged and visible through the ServiceNow portal.

3. Faster Approvals: Managers can approve or reject requests directly from the portal.

4. Centralized Management: The IT department can monitor all laptop allocations and maintain inventory efficiently.

5. Data Accuracy: Reduces duplication and ensures records are stored securely in the ServiceNow database.

2. IDEATION PHASE

2.1 PURPOSE

Many organizations handle laptop requests manually using emails or physical forms, resulting in delays, miscommunication, and lack of proper tracking. The absence of an automated system causes bottlenecks in the approval process, missed deadlines, and poor visibility of request statuses.

By using ServiceNow, we aim to create an automated workflow that ensures every request is captured digitally, routed correctly, and fulfilled in a timely manner. This ensures that both employees and IT administrators can manage laptop allocations efficiently.

2.2 EMPATHY MAP CANVAS

Who are we empathizing with?

- Employees who raise requests.

- Managers who approve requests.

- IT administrators who fulfill them.

Goals:

- To make laptop requests easy and fast.

- To automate manager approvals.

- To track and report on laptop allocation data.

Pain Points:

- Repetitive manual work.

- Delayed responses.

- Lack of centralized record keeping.

Needs:

- Self-service access.

- Real-time request tracking.

- Automatic status notifications.

Empathy Map Summary:

By understanding each stakeholder's needs, we can build a user-friendly and efficient system that reduces workload, saves time, and enhances overall satisfaction.

2.3 BRAINSTROMING

Ideas Generated:

- Design a Service Catalog item titled "Request for Laptop.

- Add mandatory fields: Name, Department, Laptop Model, Reason for Request, Duration.

- Create a Flow Designer workflow to send requests to the approver.

- Send automatic email notifications for submission, approval, and fulfillment.

- Provide a dashboard for IT to view pending and fulfilled requests.

Key Questions:

1. Who will be the approver for each request?

2. How should IT staff receive notifications?

3. Should the system include return/renewal options?

3. REQUIREMENT PHASE

3.1 OBJECTIVE

To design and implement a Laptop Request Catalog Item in ServiceNow that automates the workflow from request submission to approval and fulfillment, ensuring transparency and efficiency.

Current Challenges:

- Manual form submissions through emails.

- No automatic notification or escalation.

- IT staff unaware of pending approvals.

Expected Outcomes:

- Centralized catalog for all laptop requests.

- Automatic routing based on department or user role.

- Improved SLA compliance and faster turnaround times.

Scope:

- Catalog item creation.

- Approval workflows.

- Notification setup.

- Request fulfillment tracking.

- Physical laptop allocation or procurement.

Stakeholders:

1. Employees (Requesters)

2. Managers (Approvers)

3. IT Support Team (Fulfillment)

4. Administrator (Configuration & Maintenance)

Success Metrics:

- 90% reduction in manual effort.

- 100% visibility of request lifecycle

- Average approval time reduced to less than 1 hour.

3.2 SOLUTIONS REQUIREMENTS

Functional Requirements:
- Create a catalog item titled Laptop Request.
- Workflow routing to manager → IT department.
- Real-time notifications for each stage.
- Status tracking via ServiceNow dashboard.

Non-Functional Requirements:
- Simple and responsive design.
- 24/7 accessibility via Service Portal.
- Secure access with proper role-based permissions.

Technical Requirements:

- Use of ServiceNow modules: Service Catalog, Flow Designer, Notifications.

- Configuration through Update Sets for easy migration.

- Integration with User and Approval tables.

3.3 FLOW DIAGRAM

Employee (User)

↓

Submit Laptop Request Form

↓

Approval by Manager

↓

Fulfillment by IT Team

↓

Notification to User

↓

Closure of Request
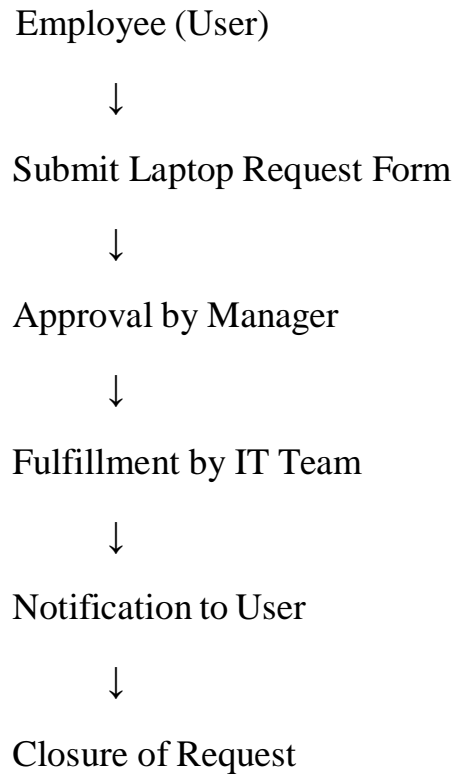
This logical flow ensures minimal manual intervention and complete traceability.

3.4 TECHNOLOGY STACK

Platform: ServiceNow ITSM

Automation: Flow Designer, Business Rules

Notification: Email and ServiceNow Alerts

Scripting: JavaScript

Access Control: ACLs and Roles

4. PROJECT DESIGN

4.1 TECHNOLOGY STACK

Core Platform: ServiceNow ITSM

Workflow Automation: Flow Designer

Notification System: Email Templates

Database: ServiceNow Tables

Security: Role-based Access Control

4.2 PROPOSED SOLUTION

The solution involves creating a Service Catalog item for laptop requests that automatically handles request submission, approval, and fulfillment. The workflow routes each request based on user details and approval hierarchy.

Benefits:

- Reduces workload for HR and IT staff.

- Increases transparency for employees.

- Provides instant status updates and audit trails.

- Supports scalability across departments.

4.3 SOLUTION ARCHITECTURE

1. Create User Roles (Requester, Manager, IT Staff).

2. Build the Catalog Item Form.

3. Develop Workflow in Flow Designer.

4. Configure Approval Actions and Notifications.

5. Test and Validate Process Flow.

6. Deploy to Service Portal for accessibility.

5. PROJECT DESIGN

PHASE	DURATION
Requirement Analysis	1 Hour
Catalog Item Creation	1 Hour
Workflow Development	2 Hours
Notification Setup	1 Hour
Role Configuration	30 Minutes
Testing & Debugging	2 Hours
Documentation	1 Hour

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 PERFORMANCE TESTING

- Test workflow speed and form load time.

- Verify system behavior under multiple requests.

- Ensure stable performance during high load periods.

6.2 FUNCTIONAL TESTING

- Validate catalog item form fields.

- Verify manager approval routing.

- Ensure notifications are triggered.

- Confirm that IT receives fulfillment tasks.

7. FUNCTIONAL AND PERFORMANCE TESTING

Output Screens:

- Setting up service now instance.
- Creation of new update set.
- Creation of Service Catalog Item.
- Adding variables to the Item.
- Creation of Catalog Ui Policies.
- Creation of Ui Action.
- Exporting Changes To Another Instances.
- Retrieving The Update Set.
- Testing Catalog Item.

7.1 SETTING UP SERVICE NOW INSTANCE

7.2 CREATION OF NEW UPDATE SET

7.3 CREATION OF SERVICE CATALOG ITEM

7.4 CREATION OF CATALOG UI POLICIES

7.5EXPORTING CHNAGES TO ANOTHER INSTANCES

7.6 TESTING CATALOG ITEM
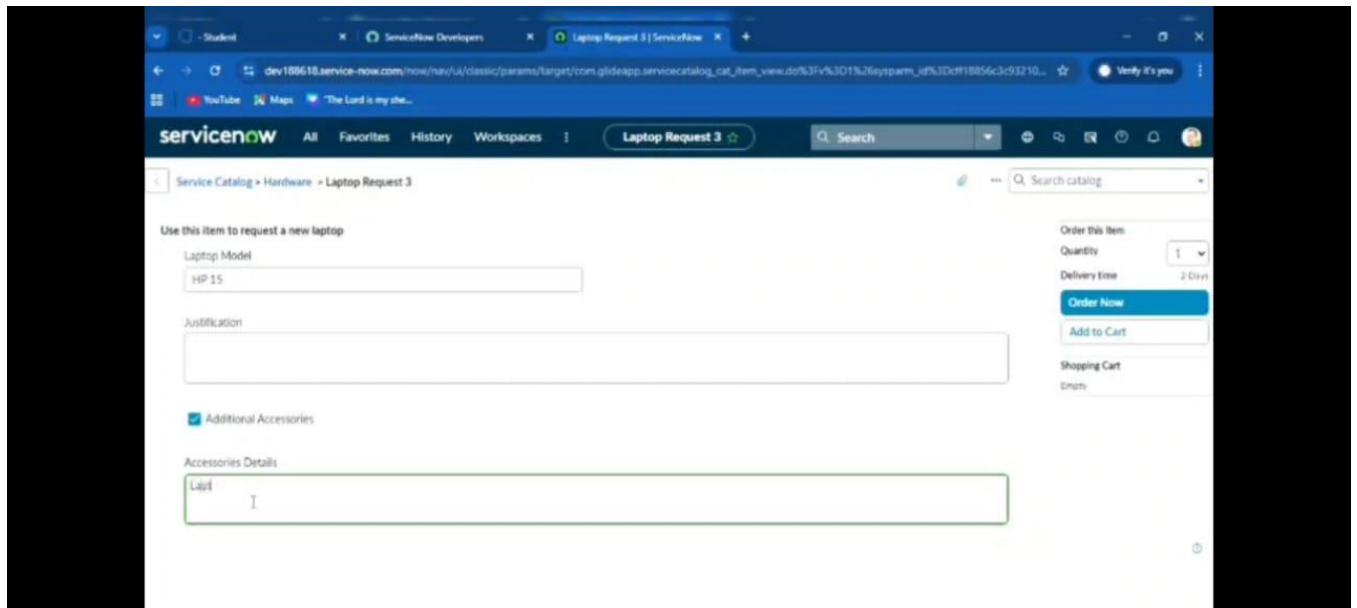
ADVANTAGES AND DISADVANTAGES

Advantages:

- Efficient approval system.

- Automated notifications.

- Transparent tracking.

- Reduced paperwork.

- Better asset management.

Disadvantages:

- Initial configuration effort.

- Requires admin access for customization.

- Dependency on network connectivity.

8. CONCLUSION

The Laptop Request Catalog Item using ServiceNow project streamlines laptop request and approval workflows, minimizing delays and manual effort. It showcases the power of ServiceNow as an ITSM tool for digital transformation within organizations. The solution enhances speed, accountability, and overall service quality.

9. FUTURE SCOPE

- Future improvements include:

- Integration with CMDB and IT Asset Management.

- Auto-assignment based on available stock.

- Mobile app notifications for managers.

- Integration with procurement tools for automated ordering.

10. APPENDIX

Source Code: No source code; used ServiceNow Platform

Dataset Link: Not applicable

Github: https://github.com/shreyram05/LaptopRequestCatalog.git

Demo:

https://drive.google.com/file/d/1fbliJqSEVYUCkOsVFXGbTlqyFPJaAVs/vi

ew?usp=sharing